

XVIII. *A New Micropterygid from Australia.* By A. JEFFERIES TURNER, M.D., F.E.S.

[Read October 6th, 1915.]

HITHERTO the only species of the family *Micropterygidae* recorded from Australia is *Sabatinca (Palaeomicra) calliplaca* described by Mr. Meyrick in the Entomologists' Monthly Magazine, vol. 38, p. 60 (1902). I first discovered this pretty little species on Mount Tambourine, settled in large numbers on the flowers of a small shrub. Since then I have taken it freely, flying during the day in shady places like a *Glyphipteryx* in the same locality, and also at Montville (1500 feet), sixty miles north of Brisbane. I have also received several examples taken at Kuranda near Cairns by Mr. F. P. Dodd. Structurally it is identical with New Zealand species of *Sabatinca*, but I am unable to distinguish any mandibles. Any addition to our knowledge of this the most primitive family of Lepidoptera, especially when it constitutes a new genus with complex relationship to those hitherto known and to the *Hepialidae*, is of special interest.

On the 12th of October 1902, as I was beating the undergrowth along a track through the jungle on Mount Tambourine (1800 feet, thirty-five miles south of Brisbane) in Southern Queensland, a small moth darted out and settled on my coat, from which I boxed it. Had it settled elsewhere I doubt whether I should have seen it. At the time I took it for a small Hepialid, to which family it would undoubtedly be ascribed from its general appearance. Its neuration is almost identical with *Fraüs*, Wlk., and even the presence of four well-developed spurs on the posterior tibiae did not seem sufficient by itself to distinguish it from this group. I was, however, struck by the curious structure of the antennae, and on mentioning this to the late Mr. Ambrose Quail, who had been paying special attention to the antennae of the *Hepialidae* and *Micropterygidae*, he at once referred the species to the latter group. Looking into the matter myself I agreed with him, and, if there had been any doubt the discovery of

an extra vein arising from 12 of the forewings, a primitive Micropterygid character, would have settled it. It is, however, a small giant in this family measuring 18 mm. across. As no further material has come into my hands since the first capture I propose to describe the genus and species without further delay.

Gen. ANOMOSES, nov.

(ἀνομος, not according to rule; σης, a moth.)

Head with loosely spreading hairs. Antennae very short ( $\frac{1}{4}$ ); basal joint somewhat thickened, not tufted; each joint with a whorl of short forwardly directed bristles from its base. Mandibles not developed. Tongue obsolete (?). Labial palpi well developed, about  $1\frac{1}{2}$ , slender, porrect, with a few long hairs beneath. Maxillary palpi long, folded. Legs rather stout and long, hairy; tarsi proportionately long; middle tibiae with apical long hairs, spurless; posterior tibiae with two pairs of long slender spurs, first pair slightly beyond middle, second at apex. Forewings with 1a obsolete, 1c obsolete (?), 2, 3, 4, 5 and 6 apparently separate, the parting vein in cell well developed in its posterior  $\frac{2}{3}$  and the fork which gives rise to 3 and 4 so obtuse as to appear continuous with discocellular, 7 and 8 stalked for a short distance, 7 to termen, 9 and 10 stalked nearly to wing margin, 11 from  $\frac{2}{3}$ , 12 giving off a short vein from its middle; length of cell about  $\frac{3}{4}$ . Hindwings with similar neuration to forewing, but 2 and 3 more closely approximated at base, parting vein in cell well developed from base, stalking of 7 and 8 longer, 12 not giving off a branch vein.

The absence of mandibles and well-developed labial palpi show that this genus belongs to Mr. Meyrick's sub-family *Eriocraninae* (*Eriocrania* type species *semipurpurella*, Stph.), although it resembles the *Micropteryginae* (*Micropteryx* type species *aruncella*, Scop.) in the absence of spurs on middle tibiae. The neuration is specialised for this group, especially in the reduction of the internal veins, which resemble those of *Mnesarchaea*, but is primitive in the presence of an extra vein arising from 12 as occurs in all the recognised genera of *Micropteryginae*. The additional vein arising as a branch from 11 present in *Mnemonica* and *Sabatinca* is, however, absent. In the long-stalking of veins 9 and 10 it approaches *Eriocrania*, in which these veins are coincident, and is specialised as

compared with the *Micropterygina*. *Anomoses* is, I believe, particularly interesting as indicating the origin of the *Hepialidae*. Its size and shortness of antennae together with its general facies are similar, and the neuration of the forewings is exactly that of *Fraüs*, Wlk. (*Hectomanes*, Meyr.), except for the presence of the extra vein arising from 12.

***Anomoses hylecoetes*, n. sp.**

(ὄληκοιτης, lurking in the woods.)

♂. 18 mm. Head, palpi, antennae, thorax, abdomen, and legs pale ochreous-brown. Forewings broadly lanceolate, costa moderately arched, apex rounded, termen very obliquely rounded; whitish-ochreous sparsely irrorated with fuscous-brown which forms transversely directed spots and blotches; a subdorsal crest of long scales close to base; cilia whitish-ochreous. Hindwings lanceolate; grey; cilia grey-whitish.

Type in Coll. Turner.

QUEENSLAND: Mt. Tambourine, in October; one specimen.